100% 90% 80% 70% 60% ■ English Other 50% Writing ■ Reading 40% 30% 20% 10% Grade 3 Grade 4 Grade 5 Grade 6 Grade 7 Grade 8 Grade 9 Grade 10 Grade 11

Figure 1. English/Language Arts Assessment Composition from Badger (3rd-8th), ACT Aspire (9<sup>th</sup>-10<sup>th</sup>), and ACT as recommended (11<sup>th</sup>)

## What currently constitutes proficiency on the ACT assessment?

ACT has established college readiness benchmarks for multiple content area assessments. Based on empirical data collected by ACT over several studies, students earning a score at or above the ACT college readiness benchmark have a 50% likelihood of earning a B or better in a related, credit-bearing college course, or about a 75% likelihood of a C or better.

These are the existing ACT benchmarks:

ACT Subject-Area Test	ACT Benchmark	
English	18	
Reading	22	
Mathematics	22	
Science	23	

These proficiency benchmarks were originally set in 2005 by ACT and modified in 2013 to reflect new studies of first year college, credit-bearing coursework. For English, classes in Composition were surveyed; for Reading, classes in social science that were reading-intensive were surveyed; for Mathematics, first year Algebra was surveyed; and for Science, first year Biology was considered.

Because ACT College Ready thresholds are well known and used throughout the state in K-12 reporting and at postsecondary institutions, maintain a high level of rigor compared to other national proficiency standards, are well-benchmarked for college entrance, and highly agree with career readiness, the standard setting group saw no need to set a competing threshold for proficiency. The group determined that it would be unnecessarily confusing to our public consumers to deviate from this standard without very strong justification. The following figures show the ACT study benchmark decisions which form the basis of the ACT proficiency decision.

September 2015 3



Figure 2.a Relationship of ACT scores to postsecondary course performance: mathematics/algebra

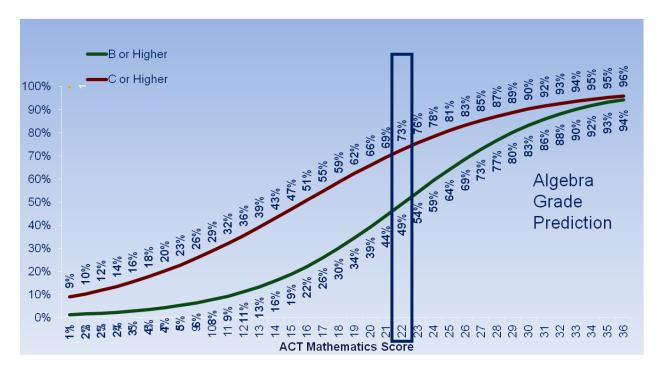
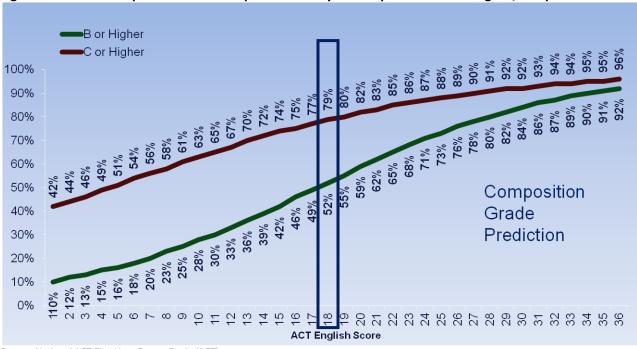


Figure 2.b Relationship of ACT scores to postsecondary course performance: English/composition

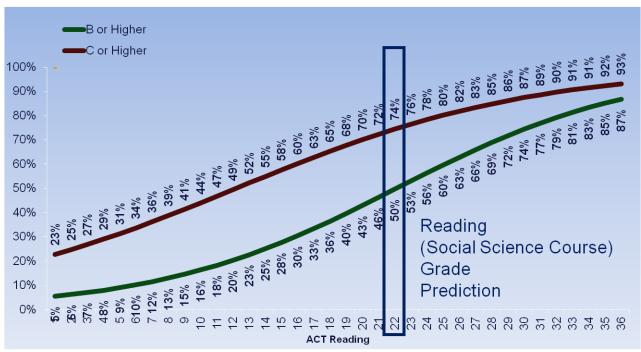


Source: National ACT First Year Course Study (ACT)

September 2015 4

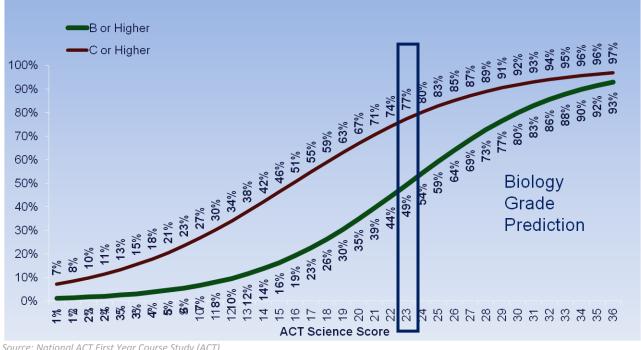


Figure 2.c Relationship of ACT scores to postsecondary course performance: reading/reading or social science



Source: National ACT First Year Course Study (ACT)

Figure 2.d Relationship of ACT scores to postsecondary course performance: science/biology



Source: National ACT First Year Course Study (ACT)

5 September 2015



Wisconsin will adopt the ACT College and Career Readiness Benchmarks and utilize these benchmarks for setting the proficient cut score for the mathematics, science, and the combined English language arts sections of the ACT assessment. The reasoning centered around the ideals of (a) consistency of reporting between ACT and DPI; (b) a reasonable concurrence with cut score impact in previous grades; (c) a maintenance of high standards; and (d) anticipation of the 2015-16 ACT benchmarks.

## What cut scores best reflect Advanced and Basic performance on the ACT?

Several options were examined for establishing Advanced and Basic cuts. Because ACT does not provide guidance on these cut scores, yet we are required to both create and give them meaning toward College and Career Readiness, DPI and the standard setting group needed to discuss and ultimately find grounding in an acceptable rationale. This rationale needed to balance the needs of those who might use them across the state, including educators, postsecondary partners, DPI accountability and reporting staff, and other parties who may be affected.

The strategies considered overtly included setting standards to benchmark other national assessments (WKCE), using ACT's methodology (course prediction), and ACT Aspire's methodology to glean cut scores. Combinations of these strategies were also considered. The group discussed what it means to perform at Basic and Advanced levels - considering impact, enrollment, prospect success in ACT studies, and career readiness data; some interest was expressed around the idea of Basic performance reflecting performance close to or approaching proficiency (ACT Aspire). The group was also aware of the important relationship of results across grade levels (and thus across tests, whether Badger, WKCE, or NAEP), developing a consistent rationale, target, and methodology (First Year Postsecondary Course outcomes), and maintaining expectations at a reasonably high level. Balancing these priorities was and will continue to be challenging.

Ultimately, the preferred methodology for establishing the Basic and Advanced cut scores was the ACT course prediction probability model, consistent with ACT's own benchmark standard setting for proficiency. Preferred probabilities for mathematics and science are 75% probability of a B or higher in a college level credit bearing course to achieve the Advanced cut point and 25% probability of a B or higher in a college level credit bearing course to achieve the Basic cut point. Adjusting the probabilities for ELA cuts allows us to address as best as possible several considerations - the fact that the writing assessment will change and currently lacks a benchmark, the fact that the scale is a combined one, and the need for more reasonable continuity at all levels with previous assessments. As a result, we decided on a 75% probability of a B or higher in college level credit bearing courses for the Advanced cut and a 35% probability of a B or higher for the ELA Basic cut score.

Content area	Basic cut score	Proficient cut score	Advanced cut score
ELA	15	20	28
Mathematics	17	22	28
Science	18	23	28

September 2015 6